

REMARKS

The Office Action mailed July 27, 2004 has been received and the Examiner's comments carefully reviewed. Claims 1-5, 7-9, 21, 22, 24-26 and 28 have been allowed. Applicants thank the Examiner for this notification. Claims 11-16 and 19 have been amended. No new subject matter has been added. Claims 1-5, 7-9, 11-22 and 24-28 are currently pending. Applicants respectfully submit that the pending claims are in condition for allowance.

Examiner Interview

Applicants' below signed representative conducted a brief telephone interview with Examiner Wang on October 26, 2004. The interview was directed toward the Examiner's comments in the Response to Arguments section of the outstanding Office Action, and proposed amendments to advance this case to allowance. In light of the discussion, Applicants have accordingly amended the claims for purposes of clarification. The Examiner is thanked for his time in discussing this matter with Applicants' representative.

Rejections Under 35 U.S.C. §103

The Examiner rejected claims 11-20 under 35 U.S.C. §103(a) as being unpatentable over Jerman et al. (U.S. Patent 6,134,207) in view of Roth et al. (PCT Pub. No. WO 02/21191). Applicants respectfully traverse this rejection, but have amended claims 11-16 and 19 to advance this case to allowance.

A. Claims 11-15

The Examiner rejected independent claim 11 stating that nowhere in the claim is the language specific to a 1x4 configuration. Specifically, the Examiner's concern appears to be that even though four different outputs are recited, that "does not mean you have four different output ports or waveguides." To address the Examiner's concern, Applicants have amended claim 11 to recite that the optical beam input is reflected and/or passed to any one of at least four different optical output waveguides.

None of the art references teaches or suggests a method of switching as now clarified in claim 11. Accordingly, Applicants respectfully submit that independent claim 11, and dependent claims 12-15 are now in condition for allowance.

B. Claims 16-18

Independent claim 16 recites an optical switch having a switching component formed in a substrate. The switching component includes first and second mirrors. An input waveguide is selectively output to any one of a plurality of output waveguides by changing positions of the first and second mirrors. The plurality of output waveguides includes first, second, third, and fourth waveguides that are different from one another.

The Examiner rejected independent claim 16 stating that nowhere in the claim does the language require four outputs. Claim 16 now recites that an input waveguide is selectively output to any one of first through fourth different output waveguides. None of the art references teaches or suggests an optical switch as now clarified in claim 16. Accordingly, Applicants respectfully submit that independent claim 16, and dependent claims 17-18 are now in condition for allowance.

C. Claims 19-20

The Examiner rejected independent claim 19 stating that the fact that there are at least four different outputs "does not mean you have four different output ports or waveguides." To address the Examiner's concern, Applicants have amended claim 19 to recite that the 1x4 optical switch includes an input waveguide and at least four different output waveguides. Also, the Examiner stated that claim 19 does not recite a 1x4 switch. Applicants note that the preamble recites a 1 X 4 optical switch, comprising

None of the art references teaches or suggests a 1 X 4 optical switch having at least four different output waveguides wherein each mirror of a pair of mirrors of the switch is selectively positionable to output the input waveguide to any one of the at least four output waveguides. Accordingly, Applicants respectfully submit that independent claim 19, and dependent claim 20 are now in condition for allowance.

Allowable Subject Matter

Claims 1-5, 7-9, 21-22, 24-26 and 28 are allowed.

The Examiner objected to claim 27, but indicated that claim 27 would be allowable if rewritten in independent form incorporating all the limitations of the base claim and any intervening claims. Applicants thank the Examiner for this notification.

SUMMARY

It is respectfully submitted that each of the presently pending claims (claims 1-5, 7-9, 11-22 and 24-28) is in condition for allowance and notification to that effect is requested. The Examiner is invited to contact Applicants' representative at the below-listed telephone number if it is believed that prosecution of this application may be assisted thereby.

Although certain arguments regarding patentability are set forth herein, there may be other arguments and reasons why the claimed invention is patentably distinct.

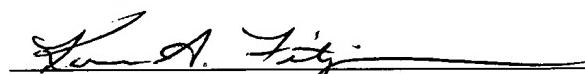
Applicants reserve the right to raise these arguments in the future.

Respectfully submitted,



Date: Oct. 26, 2004

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300


Karen A. Fitzsimmons
Reg. No. 50,470
KAF:cjm